

CLEAN COPY OF AMENDED CLAIMS

rule  
B1  
A1

1. (Amended) A Schottky barrier diode comprising:  
a substrate region of a first conductivity type formed underneath a semiconductor material layer of the same conductivity type;  
a metal layer; and  
at least two doped regions of a second conductive type formed in said semiconductor material layer, each one of said doped regions being disposed under said metal layer and being separated from the other doped region and said substrate region by portions of said semiconductor layer.

A2

6. (Amended) The Schottky barrier diode according to claim 1, in which said doped regions further comprise heavily doped body regions having the same conductivity type of said doped regions.